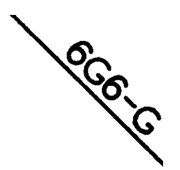




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POWER AMPLIFIER PENTODE

Heater	Coated Unipotential Cathode		
Voltage	6.3		a-c or d-c volts
Current	0.15		amp.
Direct Interelectrode Capacitances (Approx.):°			
Grid to Plate	0.5		μμf
Input	5.5		μμf
Output	7.0		μμf
Maximum Overall Length			4-1/8"
Maximum Seated Height			3-9/16"
Maximum Diameter			1-9/16"
Bulb			ST-12
Base			Small Shell Octal 7-Pin
Pin 1-No Connection			Pin 5-Grid
Pin 2-Heater			Pin 7-Heater
Pin 3-Plate			Pin 8-Cathode
Pin 4-Screen			
Mounting Position	BOTTOM VIEW(G-7S)		Any

Maximum Ratings Are Design-Center Values

AMPLIFIER - Pentode Connection

Plate Voltage	300 max.	volts
Screen Voltage	300 max.	volts ←
Plate Dissipation	2.75 max.	watts
Screen Dissipation	0.75 max.	watt
D-C Heater-Cathode Potential	90 max.	volts ←

Typical Operation and Characteristics— Class A_1 Amplifier:

Plate Voltage	135	180	volts
Screen Voltage	135	180	volts
Grid Voltage *	-6	-9	volts
Peak A-F Grid Voltage	6	9	volts
Zero-Sig. Plate Cur.	11.5	15	ma.
Zero-Sig. Screen Cur.	2	2.5	ma.
Plate Resistance	0.170	0.175	megohm
Transconductance	2100	2300	μmhos
Load Resistance	12000	10000	ohms
Total Harmonic Dist.	7.5	10	%
Max.-Sig. Power Output	0.6	1.1	watts

AMPLIFIER - Triode Connection▲

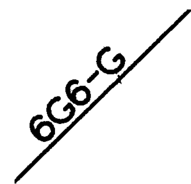
Plate Voltage	300 max.	volts ←
Plate Dissipation	3.5 max.	watts ←
D-C Heater-Cathode Potential	90 max.	volts ←

Typical Operation and Characteristics — Class A_1 Amplifier:

Plate Voltage	180	volts
Grid Voltage*	-12	volts
Peak A-F Grid Voltage	12	volts
Amplification Factor	9.5	
Plate Resistance	4750	ohms
Transconductance	2000	μmhos
Plate Current	11	ma.

← Indicates a change.

°, ▲, *: See next page.





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POWER AMPLIFIER PENTODE

(continued from preceding page)

Load Resistance	12000	ohms
Total Harmonic Distortion	5	%
Max.-Sig. Power Output	0.25	watt

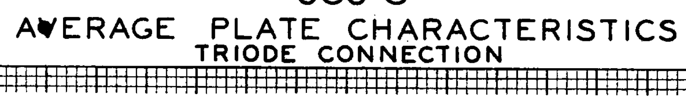
° With no external shield.

* Under maximum rated conditions, the d-c resistance in the grid circuit may be as high as 0.5 megohm with cathode bias or 0.1 megohm with fixed bias.

▲ With screen connected to plate.



6G6-G



AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION

E_f = 6.3 VOLTS   GRID №2 CONNECTED TO PLATE

GRID VOLTS E_c = 0, −6, −12, −18, −24, −30, −36, −42, −48, −54

PLATE VOLTS: 0, 100, 200, 300, 400, 500

PLATE MILLIAMPERES: 40, 30, 20, 10, 0

AUG. 12, 1943

RCA VICTOR DIVISION
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6G6-G
AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION

E_f = 6.3 VOLTS SCREEN VOLTS = 180

AUG. 19, 1943

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